



ATARI DEVELOPMENT PARTNER NEWSLETTER

January 1990

PROGRESS

After one full month of evolution, the developers' program is progressing rapidly. The customer database should be in the mail before this newsletter reaches you. Atari Softsource is starting to shape up and Dan McNamee has suggested categories for your products (see Dan's article, page 6). A dealers and press contacts database is planned. Developer pricing has been finalized and the price list is included in this issue. The first batch of orders for unreleased products is being processed. We are creating the promotional materials for the free magazine subscriptions and all the magazines are participating. We are opening channels for your input to our decision making processes.

All in all, it's been a busy and productive month. The new year looks very exciting.

THE NAME GAME

We have many important goals, and some minor ones. One of the minor goals is to find a really great name for the developers' program. After debating names internally for far too long, we decided we couldn't decide. Therefore, we hereby announce The Really Great Name Contest. Send us your Really Great Name for the Atari developers program. The Really Great Names will be judged by us and the decision of the judges is arbitrary. And final. Send your entry to:

Atari Corporation
Attn: Shanna Dewey
1196 Borregas Avenue
Sunnyvale, CA 94089-1302

The winner receives a CDAR 504 CD ROM player. In the event of duplicates, the earliest postmark wins. Send your entries by Jan. 30, 1990.

RENEW NOW!

This is the last Newsletter for inactive developers. Starting February only developers who have reregistered can participate in the program. If you have not already done so, you must renew your registration. That

SO FAR...

Charles Cherry

means filling out a new application and non-disclosure agreement; there is currently no renewal fee. If you do not get a February Newsletter, it means we've dropped you from the active list. If that is an error, give Gail Johnson a call (408-745-2568). We don't want to lose you and we apologize in advance to any developer dropped by mistake.

CO-MARKETING OPPORTUNITY

Atari is planning a 520ST bundle. It is designed to provide a complete hardware/software package for the home user at a VERY low price. This package will be announced at CES and released soon after. Software titles in the bundle may be added or changed throughout the year. Newspaper, magazine, and television advertising is planned. If you have candidates for this bundle, submit your proposal (quickly) in writing to

Charles Cherry. Your products must run in 1/2 meg, use a TV as a monitor and be useful in the home.

SYSTEM PRIORITIES

We have identified four system level projects which need to be addressed. They are: multi-tasking, networking, virtual memory, and unified imaging models (like Postscript or meta files). We need your help assigning priorities to these projects. We are already gathering data on multi-tasking and networking (see below). Perhaps these are not the most pressing needs for your products. In order to help you the most, which should we do first? Second? Third? Why? Consider how these capabilities will

affect your products, your sales, our sales. Are there other projects like these we should be considering? Please send me your thoughts in writing.

NETWORKING

Networking appears to be in everybody's future. I've been in touch with

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PERSPECTIVE

Antonio Salerno

PARTNERS?? PARTNERS!!

A few people have asked how we can afford to give all that we are giving in the new developer program. They point out that other companies charge for much of what we are doing, as well as pointing out that we don't have nearly the profit margin other companies do. They point out that giving developers the current registered user list is equivalent to giving about \$4,000 (40,000 names times \$.10) to each developer (ask Apple about getting their names). They point out that putting **SOFTSOURCE** in place will be costly, etc.

While their points are correct, there is another issue, which makes for a very simple answer: we can't afford not to. As we've said before, **YOU ARE OUR PARTNERS**, and we have to help you in order to help ourselves.

Many of you have said, "we've

heard it before." Well, I'm not here to instill you with religious fervor, or to promise you the moon. However, I am here to tell you that this effort is real and that we are turning the situation around.

SYSTEMS SOFTWARE

There are items that are on people's wish list for our systems software (aren't there always?). However, given the resources we have, we must be sure that we do the most important first. The issues that most of you want are:

- Networking
- Unified Imaging Model
- Multi-tasking
- Virtual Memory

So the big question is: which one do I put resources into most, which one second, etc.? I hope that you will approach the issue from the viewpoints of both long-term and short-

term. We cannot mortgage our future, but we are trying to be attentive to the needs of the market today. Please write a note to Charles Cherry with your thoughts.

DEVELOPMENT

We have been debating recently how similar development for the ST is to development for "Windows." Your input as to the similarities and differences would be most appreciated. Additionally, if you know of any good tools to port from Windows, we'd like to hear about them. Please write to me, Antonio Salerno, and let me know what your thoughts are.

Finally, I'd like to tell you that the revamped program we recently put in place is just the beginning. Internally, I've referred to it as "Chapter 1." To use a bit of metaphor, the next several chapters are written. You'll read about them soon.

...continued from page 1

many developers working in this area. I've asked several of them to write articles for the next Newsletter. If you're working on networking and have not spoken to me, give me a call. Let's get together and set a sensible standard that serves everyone's needs.

MULTI-TASKING

Multi-tasking is one of the highly visible features for new operating systems. Some think it's vital to the future of computing, some think it's vastly overrated in single-user applications. We want to do multi-tasking right and we want to do it at the right time. We need your guidance to help us establish its priority and

specifications. We invite your input. Is multi-tasking important to your products' future? How will multi-tasking, or the lack of it, affect your sales? Is multi-tasking needed for the ST (where there is no hardware memory protection), only for the TT (where protection is available), or both, or neither? How complete does multi-tasking need to be, is a switcher enough? How many tasks need to run at a time? Is GEM-level enough, or does it need to work at TOS-level? What should the user interface look like? What about code sharing? If you've worked on multi-tasking, what pitfalls can you point out for us? Please send your ideas, in writing, to Charles Cherry.

See Frank Foster's article on MIDI-Tasking, page 3.

COLOR CARD OFFER

Image Systems is offering their exciting hi-res color card to Registered Atari Developers for just \$580 (regular price \$800)! This card produces a 1024x768 non-interlaced display with 16 colors out of a palette of 4096 and is compatible with any properly written GEM program. Soft-Logik used it to demonstrate Publishing Partner at Comdex. It looked fabulous.

The card requires a MEGA ST and an analog color monitor capable of this resolution (i.e., NEC Multisync XL). The board also has a socket for a math coprocessor. Call Image Systems at 612-935-1171. Limit one card per developer, please.

ATARI MIDI-TASKING

Frank Foster

One group that needed multi-tasking yesterday is Atari's highly active MIDI developers and musicians. With more than five different switching systems on the market, developers began to look to Atari for leadership in setting a standard.

After a meeting in Frankfurt between Atari, C-LAB and Steinberg, it became clear that Atari would have to take a stand on the issue and even supervise the R&D of a new utility program.

At the 1989 summer NAMM music convention, Atari held a meeting of the MIDI developers. Over 40 people showed up to discuss the pros and cons of each of the existing systems. The result of this meeting was the decision that Atari would work with programmers from Intelligent Music to create a system that would meet, as much as possible, the needs of everyone. This system would allow limited multi-tasking of GEM programs with processing priority to MIDI sequencing applications. The Atari ST has the reputation in the industry for the best music timing and this could not be sacrificed. The system would also allow data sharing between applications using a clipboard feature. Plus all MIDI and SMPTE drivers would be standardized, further increasing compatibility between MIDI programs.

The Atari MIDI-Tasking project has now reached the point where we would like help in testing from 3rd party developers. Many well behaved GEM programs work pretty well with the system already, although some programs may require changes to work correctly.

To get involved in the testing, send a written request to Charles Cherry. Beta-testers will be required to submit written reports on their findings.

INFO BITS...

PRODUCTS WANTED

Impresiones Perfectas S.A., a software distributor and magazine publisher in Costa Rica, is looking for products to distribute in Central and South America. They can help with translations and are interested in all kinds of software for the ST and 8-bit machines. Contact Joseph Zia, Impresiones Perfectas S.A., Apartado 471007, San Jose, Costa Rica. Phone 506-31-5742. Or write to P.O. Box 149010, Coral Gables, FL 33114.

PRODUCTS AVAILABLE

ST Works, a Microsoft Works look-alike, is looking for U.S. distribution. Contact M. M. Sanyal at Complete Computer Cure, Inc. 901 W. Victoria Street, Unit A, Compton, CA 90220, phone 213-637-6549.

IBP is seeking a U.S. distributor for their 190ST, a rugged, rack mountable MEGA-compatible. This is ideal for a company selling industrial applications. Contact Werner Pfingstmann at IBP Elektronik GmbH, Lilienthalstrasse 13, D 3000 Hanover 1, West Germany. Phone 0511-630963, FAX 0511-638551.

PRODUCT SEARCH

If you have any information on ST products in the following categories, please call Charles Cherry at 408-745-2082:

- Personal Information Management (like Current, Agenda, or Grand View)
- Project Management
- HyperCard
- Integrated Software (like MS Works, Framework, or ST Works)

CONFIDENTIALITY

The developers program, by its very nature, is about developments. It's about plans for the future. Our plans, your plans. Business plans that are very sensitive. Businesses need to protect them. But partners need to share them. This only works if partners protect each other's secrets.

The problem is knowing what's secret and what's not; information that seems widely circulated may still be sensitive. Therefore, you must assume everything is secret.

We are trying to open up information channels. This Newsletter has some information about marketing plans, prices and suggestions about directions we may be taking in the future. The information doesn't go very far because, frankly, we're not sure we can trust all of you. As our confidence grows, we will reveal more of our plans.

You can help our confidence level by respecting our confidentiality. Don't repeat information from the developers program. Not to anyone, not for any reason. If you think someone needs to know, have them talk to us. If you hear a rumor, don't confirm or deny it. The information you have is privileged. It is for your use in developing products for Atari computers, nothing else.

The confidentiality of the developers program extends to the press. This Newsletter is not a press release, we are not spokespersons, and this is not Atari's press relations office. The information you get from us is confidential and not to be reprinted or reported to your readers without our specific permission.

Developers who violate this confidentiality will be excluded from the developers' program. Widespread violations will halt the information flow for everyone.

GETTING THE BEST SERVICE

Gail Johnson

To expedite your hardware and software orders as quickly and efficiently as possible, please follow these steps:

1. Make a copy of the blank order form in this newsletter. Fill in ALL the information using the price list at the end of the newsletter for reference. You must use a street address as the shipping address, UPS cannot deliver to a P.O. box.

Note: If equipment requests seem excessive, we may require justification from you.

2. Enclose a certified check or money order payable to Atari Corporation. All prices include prepaid shipping via UPS Blue or equivalent. Please remember to include tax, if applicable (California, 7.25%; New Jersey, 6%; Arizona, Illinois and Massachusetts, 5%).

3. Send your order to:

Atari Corporation
Attn: Gail Johnson
1196 Borregas Avenue
Sunnyvale, California 94089-1302

Everyone has an urgent need for equipment, and everyone will be accorded equal treatment. Please plan your equipment requirements carefully and order in advance of your needs.

We can accept mail-in orders only; no walk-in, will-call or telephone orders. We make every attempt to process your order in a timely manner, but occasionally there are unavoidable delays. Please allow at least 10 business days from receipt of your order before calling on the status of it.

COMPATIBILITY TESTING

Leonard Tramiel

The goal of the operating system group here at Atari is to develop new versions of TOS for three different reasons.

The first, and most obvious, is to support new hardware features, second is to add new features to TOS and third is to fix bugs (there, I admit it). The largest constraint on our actions is the growing library of existing TOS software; it is clearly a very bad idea to develop a new version of TOS that breaks large numbers of software titles.

To do this we need your software, and updates, in our library. There are many different ways that we can minimize the chances of breaking software. The one that we have chosen (for a variety of logistical and historical reasons) is to maintain a library here at Atari and run new versions of TOS through that library. If a problem is found we contact the developer and let them know what is going on.

I want to emphasize that in most cases it is Atari that actually does the debugging. We realize that it is unlikely that our TOS development cycle will fit in well with the developer community's free resources. As a result we track down the bugs here and report what we find. This technique has been quite successful, but anything can be improved.

Let me give a couple of examples. Our test group runs a new TOS version past the library and reports problems. We then get out the debuggers and logic analyzers and begin the hunt. The following are actual case histories (the names were removed to protect the guilty).

In one case, a location in the system header was used as a pointer to get some data that was never used. A bit silly, but no harm. Alas, the location in

the system header is the version number. Result, an odd version number would cause this software to crash (address error), therefore, all TOS versions are even.

In another case the software worked fine except that the mouse didn't move. We suspected that line-A was being used to find the mouse position and that the locations were not referenced relative to the line-A pointer. So we checked and, behold, a line-A INIT call is actually being done and the pointer is stored somewhere; looks like we were wrong. We continued to look and couldn't find anything. Further study found the problem: the line-A pointer was never used. After doing the INIT call this code still used absolute locations for line-A variables. No way for us to fix this.

The biggest problem that the compatibility testing here at Atari faces is lack of software to test. It is essential that we have a complete set of software, including updates. This is the only way we have to ensure compatibility with existing applications. Another thing you can do to help us do a better job is to steer us to areas of your software that you believe may be particularly sensitive to TOS changes, or where you do things with TOS that are uncommon.

Let me take this opportunity to emphasize our point of view: we have an operating system, please use it. I know that it is not perfect. If you believe it is essential for you to use some undocumented feature or data structure, please let us know by reporting it to J. Patton in technical support. If we know about it, we can make an effort to maintain it in future releases. Besides, if you tell our support group what information you need, there is a good chance they will be able to tell you how to do what you want legally.

QUESTIONS AND ANSWERS

J. Patton

VDI

Q: What is wrong with the `v__bit_image` call?

A: `V__bit_image` was incorrect in the `VDIBIND` module, but if you make the call yourself it will work. Following is the code, just call `real__bit_image` in your program:

```
real__bit_image(handle, file, aspect,
x__scale, y__scale, h__align,
v__align, xy)
int handle;
char *file;
int aspect;
int x__scale, y__scale;
int h__align, v__align;
int xy[];
```

```
{ int i;
  for (i = 0; i < 4; i++)
    /* Set up rectangle */
    ptsin[i] = xy[i];

  intin[0] = aspect;
  /* Set up parameters */
  intin[1] = x__scale;
  intin[2] = y__scale;
  intin[3] = h__align;
  intin[4] = v__align;

  i = 5;
  while (intin[i++] = *file++);
  /* Copy string out */
```

```
  contrl[0] = 5;
  contrl[1] = 2;
  contrl[3] = -i;
  /* Length of string */
  contrl[5] = 23,
  contrl[6] = handle;
  vdi(); }
```

Q: I'm using some GDOS fonts on a page which look okay on the screen, but when I try to print them out, I'm only getting system fonts. I have all the GDOS fonts installed, but still am having problems.

A: Make sure that your `v__updwk` call is made before you make the

`vst__unload_fonts` call. As soon as you make the `vst__unload_fonts` call, it immediately dissociates the external font.

DEVELOPMENT TOOLS

Q: I'm working with Alcyon and trying to link with `LIB81`, but getting an unresolved symbol `__fpltof`.

A: The symbol `__fpltof` is supplied by the library "libf" which is used by the fast-floating point code. This library can only be used if you've compiled your code with the `-f` option to `C068.PR`. `LIB81` replaces `libm`, not `libf`.

The `-f` compiler option should not be used during compilation. Use `libm` when floating point math is not required. It could be that the program being compiled and linked is expecting to `__fpltof` and cannot because it is linking the wrong floating point library.

This is a good opportunity to reiterate that `LIB81` is Alcyon 4.14 compatible (since it was derived from `libm`) and cannot be mixed with the version of Alcyon distributed with the Developer's kit.

AES

Q: I'm having a few problems with my desk accessory, one of which is when I select it in the desk menu it won't run. Furthermore if I attempt to select it nine times, the mouse quits responding. What's it doing?

A: There are a couple of things to watch for when setting up to do desk accessories in Alcyon. First, since Alcyon sets a global variable, the application id should be declared as the external global `gl__apid`. When `appl__init` is called, it will automatically set this variable; ie., don't set

the id to the return value of `appl__init`. You can then use `gl__apid` in the `menu__register` call. In other programming systems, this is not a global variable (`MWC`, `TDI` Modula, and `Laser C` are a few). My guess is that you are opening a virtual workstation each time you open, but don't close it.

DESKTOP

Q: We've noticed that all the TTP programs we have can redirect their output. Is this true for all cases?

A: No, this is not the case. We suspect that the programs you have use `printf()` statements which were written to look at the command line. Normally it is up to the application to look at the command line and determine what to do.

NEW ONLINE

PCF554.ARC Sets the step rate for drive B: to 6ms. Works with all versions of TOS for the PCF554 drive.

PEXEC.ARC Discussion of `PEXEC` modes including additional mode added with TOS 1.4.

ARGVSP.ARC Enhanced method of passing arguments to `GEMDOS` child processes.

C-JAR.ARC Standard for identifying TSR's and machine configurations established with the STE with backward compatibility discussed.

AHDI3D.ARC Atari's Hard Disk Interface 3.00 release notes. Adds support for more than 4 partitions and partitions greater than 16M.

MAC105.ARC Madmac version 1.05.

MACDOC.ARC Madmac documentation.

ATARI SOFTSOURCE

Dan McNamee

Hello, my name is Dan McNamee. Some of you may know me or have heard of me. I have worked here at Atari for almost two years now in the Customer Support department. I recently moved to a newly created position and work with the developer support team. My new position centers around our new developers' marketing support mechanism, Atari Softsource.

Atari Softsource has many fathers. In it's first incarnation, it was to be a support mechanism here at Atari. With this database, Customer Support would have been able to help users find a product. It only held basic information, such as the program's name, a brief description, and the manufacturer (or distributor) of the product.

When Antonio Salerno came on board, he asked us what we really wanted to do. I mentioned my ideas for the database, and he gave me the go ahead to work on it. Antonio helped me in creating all the different categories and sub-categories, as well as putting Softsource online. Jay Crosby came up with the idea of having demonstrator copies of the programs listed in Softsource being available for downloading from the database. And last, but not least, Leonard Tramiel suggested putting the entire thing on CD ROM and distribute it to Atari dealers. Put all these wonderful ideas together, and you have Softsource as it stands today, ready to go into use.

Atari Softsource can be a wonderful tool if it is properly used, and for that I need your help. On one of the online services, there will be a database for users to search for all kinds of products for their ST computers. What I need you, the developers, to do is enter the information about your products into this database and upload your disabled demos and self-running demos. I will go into

more detail on how you do this once the actual mechanism is in place. Also, since this is a new application, I need some input from you on your needs. I welcome any and all suggestions. The best and quickest way to get a hold of me is on the online services. You can drop me a note on GEnie at the address D.MCNAMEE, or on CIS at 70007,2527. Or you can write to me at:

Atari Corporation
Attn: Dan McNamee
1196 Borregas Avenue
Sunnyvale, CA 94089-1302

Please do not call with suggestions; it is much easier for me if I have a written note in front of me rather than a voice on the other end of a wire.

The main way for users to look for titles in Atari Softsource is by product categories. I have set up several categories, and these are then subdivided into more specific topics. It is important that you look though this list and send me suggestions for additional categories that I may have missed.

In the next newsletter I will go more into detail on where and how you will be able to enter your products into the database and I will provide a list of fields and their sizes. Until next time...Dan

Business:
Business Forms
Commercial Arts
Data Entry
Database Management Systems
Desktop Publishing
Human Resource Management
Integrated Productivity
Invoicing/Order Entry
Mailing Lists
Marketing/Sales
Miscellaneous Business
Project Management
Purchasing/Inventory
Sorting/Merging
Spreadsheets
Spreadsheet Support
Statistics
Taxes
Time Management

Time/Client Billing
Word Processing
Word Processing Support

Education:
Administration
Aptitude Testing/Counseling
Cognitive Development
Composition/Grammar
Computer Literacy
Computer Tutorials
Curriculum Development/Authoring
Early Childhood Development
Geography
Government/Economics
History
Humanities
Languages
Library Management/Reference
Math
Miscellaneous Education
Reading/Vocabulary
Science
Social Sciences
Special Education
Speed Reading
Spelling
Typing Tutorials
Vocational/Business Skills

Entertainment/Personal:
Adult
Adventure
Animation/Movie Making
Arcade/Simulation
Astrology/Divination
Career Development
Cooking/Diet
Electronic Publications
Financial/Legal
Gambling
Genealogy/Family History
Health/Self-Improvement
Hobbies
Household Management
Miscellaneous Entertainment
Miscellaneous Personal
Music
Sports
Sports/Games
Strategy
Travel

Financial:
Accounting-Fixed Asset
Accounting-General Ledger
Accounting-Integrated Systems
Accounts Payable/Check Writing
Accounts Receivable
Financial Forecasting/Modeling
Investment Management
Miscellaneous Financial
Payroll

Hardware:
Accelerators
Emulators
Graphic Boards/Frame Buffers/Video
Adaptors
Mass Storage
Memory expansion
Other

Industries/Vertical Markets:
Aerospace
Agriculture
Automotive
Aviation.

Chemical
Computer-Aided Design (CAD)
Computer-Aided Manufacturing (CAM)
Construction/Contracting
Energy (Oil/Gas/Alternative/Etc)
Engineering (Civil/Structural)
Engineering
(Electrical/Electronic)
Engineering (Mechanical)
Engineering (Miscellaneous)
Inventory Industries
Lumber
Manufacturing
Mining
Miscellaneous Industries
Surveying
Transportation

Music/MIDI:
Composing
Cue Sheets
Educational
Interface
Librarian
.. Mixing

Miscellaneous Music/MIDI
Patch Editor
Player
Sample Editor
Scoring
Sequencer
Sounds
Utility

Personal Productivity:
Data Entry
Database Management Systems
Fonts/Images
Graphics
Graphics Support
Miscellaneous Productivity
Spreadsheets
Spreadsheet Support
Taxes
Time Management
Word Processing
Word Processing Support

Professions/Services:
Architecture/Interior Design
Banking

Communications/Media
Desktop Publishing
Food/Restaurant
Government/Municipalities
Hospital Management
Hotel/Motel
Insurance
Leasing/Rental
Legal
Medical (Diagnosis/Analysis)
Medical/Dental Office Management
Miscellaneous
Professions/Services
Non-Profit Associations
Pharmaceutical
Public Utilities
Publishing/Printing
Real Estate/Property Management
Recreation
Retail/Wholesale
Veterinary Practice

Sciences:
Astronomy
Biology
Chemistry

Earth
Environment
Mathematics
Miscellaneous Sciences
Nuclear
Physics

System Applications/Programming:
Artificial Intelligence/Expert Systems
Assemblers
Communications/System Emulation
Compilers/Interpreters/Languages
Conversions/Cross Compilers
Device/Utility Controllers
Diagnostics/Analysis
Information Retrieval
Operating Systems
Program/Report Generators
Programming Development
Security/Encryption
System Administration
System Utilities

DOCUMENTATION REPORT

Mark Jansen

As technical editor, I am responsible for some of the documentation here at Atari. Among my projects were the Rainbow TOS Release Notes, and before that, Still Another Line-A Document.

After some discussion with Leonard Tramiel, we agreed it would be useful to ask for suggestions, comments, and questions specifically related to our developer documentation.

We want to improve our documentation, and we want to know your thoughts on how and where to do so. What do you like about the documents you have? What, specifically, do you not like about them?

Comments like: *The documentation for the 'mangle__FATs()' call is incorrect: it says the call returns 1 when successful, when it really returns 0, are terrific and helpful! They're specific and show us what to fix.*

Whereas comments like: *The documentation for the 'voltage__*

spike()' call is not useful, mumble, mumble, mumble, aren't helpful, for obvious reasons.

Why isn't it useful? Is it incorrect? Do you not like the presentation? What questions does it leave you with? We really, really want to get it right, so you have to tell us what is wrong, and how you'd like us to fix it.

We'll be paying attention to what you say, and using it to improve the documentation we have, write some new material, and decide what documents get first attention.

We will listen to what you say and seriously consider every comment (except flames, which will be cheerfully ignored). We will let you know how we feel about what you've said, if appropriate. What you say will make a difference, even if that difference isn't immediately apparent.

I'm worried, though, about some unrealistic expectations. If you com-

ment on something, please don't expect to see a new document two weeks later. Priorities change and, unfortunately, that sometimes means your pet document gets put on the back burner for a while. For that reason, among others, I will shy away from telling you exactly when a particular document will hit your doorstep. If you have a particular question, we can get that answered quickly, but documenting something in detail takes longer.

So, send your questions, comments, and suggestions to:

Atari Corporation
Attn: Developer Documentation
1196 Borregas Avenue
Sunnyvale, CA 94089-1302

We think this can work, and that it will benefit everyone involved. Let us know what you think. We're listening.

MARKETING NOTES

Shanna Dewey

Marketing can be described as any planned process that assists buyers and sellers in receiving mutual satisfaction as a result of a transaction. Unfortunately, most people unfamiliar with marketing equate marketing with selling. But selling is only one facet of marketing.

The marketing plan is composed of four elements: Identification of Business, Knowing Your Customer, Selection of Strategies (the 4 Ps) and Implementation of your plan.

IDENTIFICATION OF BUSINESS

The first thing you need to determine is what your business is. If you don't correctly identify your business, you may misjudge who your competitors and customers are and adopt marketing strategies that may be ineffective. Most of you are not in the software business. Your business is accounting or inventory control or computer games.

KNOW YOUR CUSTOMER

Identifying your customers is probably the next most critical aspect of your marketing plan. If you don't correctly identify your customers, you will reach only a fraction of them. And to keep the ones you already have, you need to satisfy them. You need to study them. Keep in mind that people and business are always changing. What was true yesterday may not be true tomorrow.

There are two ways to identify your customer group; demographics and psychographics. Demographics are used to target and categorize a specific market. The data represented can be broken down numerically and/or statistically. There are eight key areas. (Note, all data listed below was collected by the U.S. Bureau of the Census.)

Age. As a result of longer life-spans, the average age of the U.S. population is now 33 years old and 12 percent of the population is over the age of 65. Campbell's Soup for One is an example of marketing to this target market.

Occupation. More and more people are moving into white-collar jobs in the U.S. As this trend continues, blue-collar and agricultural jobs will move to lesser developed countries.

Disposable Income. As more people become part of two-income families, their disposable income and expenditures rise.

Gender. As more women move into the work place, more products and services traditionally reserved for men are being marketed to women (life insurance, health clubs).

Education. Better educated consumers are demanding to know more about the products and services they are buying. Consumers are spending more time reading the labels and discovering that often the only difference between products is the name and place of manufacture.

Marital Status. More married couples have two incomes which allows for greater purchasing power. A divorced parent is making purchasing decisions that were usually shared by a spouse.

Location. Where are your customers located? Is it worth your while to convince potential customers to travel a little farther for your product or should you concentrate on penetrating your local area? Information of your customers' locations can be obtained from sales receipts or mail orders.

Housing and Mobility. Whether your customers own or rent will give you

insights to their mobility. Will their jobs keep them in one place for several years? The answers to these questions will tell you which products and services will be in demand.

Gathering demographic information about your customers is not as difficult as it may seem. If your customers order your product directly from you, include a brief questionnaire or ask them questions over the phone.

Not all the people in a similar demographic category will act alike. Psychographics takes demographics one step further by considering the individual wants and needs that create a unique lifestyle. *Voluntary Simplicity* and *Keeping Up With the Jones'* are two common lifestyles. *Yuppies* and the newly emerging *DINKs* are other lifestyles.

Knowing the lifestyles of your customers gives you a much better profile of your customer base. This will enhance your marketing efforts.

STRATEGIES: THE FOUR Ps

The four Ps of marketing are Product, Price, Promotion and Distribution (or Placement) and they make up the foundation of your marketing plan. Now that you know what business you're in and who your customers are, the four Ps provide a basis to reach those customers.

Product: How will your product benefit your customers? Why should they buy yours and not your competition's? What benefits does it have? What features does it have? These questions and more are usually taken into consideration long before you start development of your product. Most of the time, you are not consciously aware of these questions, but the answers are important since your marketing plan is based on them.

Price: There are three pricing strategies: penetrating, competing and elite. There are advantages and disadvantages to each, depending on the image you want your product to convey and how strong the competition is in your particular business.

A penetrating price is lower than the competition's, usually generating a price war (remember the gasoline price wars in the early '70s?). This strategy may generate market share, but the main disadvantage is that if you price too low, some of your customers may perceive your product to be of lower quality than your competitors'.

Competitive pricing is pricing your product the same as your competition. The main advantage to this strategy is that you force the consumer to be aware of the features and benefits of your product as opposed to the primary deciding factor being price. If you decide to price in this manner, make sure your product is at least as good as your competitor's, if not better.

An elite price is higher than the competition's and gives your product an elite status (note the difference between Macy's and Sears). To be effective, your product must not only be perceived as being better than your competition, it must also look it. Actually being better is a definite plus, but you knowing it's better is not good enough; your customers must know it, too. Many people still equate price with quality (first class airline tickets vs. coach class), but this is becoming a cloudy area in some industries (name brands vs. generic brands).

Make sure you know what your time and skills are worth. You are a businessman and your time is worth money, even to your friends. If you are currently selling your product only to people you know, ask yourself if you would feel cheated if you sold it to a stranger for the same price.

One way to determine the price range for your product is to do some research. Check trade magazines and see how comparable products are priced. The high end of the range is elite pricing, the low end is penetrating and the middle is competitive.

Promotion: Promotion involves more than advertising and publicity. Your product's image is also a key factor. Is the package a bold yellow that says "Come and get me! I'm very exciting!" Or does your packaging suggest a calmer, more reserved, perhaps more "professional" image. The color, lettering, shape of the package, logo and any other graphics used in the packaging will influence the image of your product.

We all have preconceived ideas of how certain things should look or the way they should be done. Conforming your product to these preconceptions may enhance consumer acceptance.

Advertising and publicity are also a large part of promotion. Advertising and publicity are different in that advertising is always paid for and publicity is always free. Usually, publicity is a one time thing, but the amount of your advertising is entirely up to you and your finances.

Advertising can range from the very expensive 60 second spots on prime-time television to the almost free one-page flyers stapled to telephone poles around town. How much you want to spend is usually the deciding factor in whether you hire a professional advertising firm or do the advertising yourself.

If you decide to do your advertising yourself, as I suspect most of you will, there are several inexpensive options. One of the most effective advertising tools is listing your phone number in the local yellow pages or the 800 business directory. Call your local telephone company for details.

You can also develop a simple flyer to be sent in the mail. As you will be receiving the Atari customer list, you will already have thousands of people to send them to. (Details on brochure design in the March issue.)

If you are listing your software on a bulletin board, I recommend providing a disabled version for downloading and give the address, price and all other information needed to order a complete version. Provide your phone number to answer any questions potential customers may have. If you provide a complete version for downloading, most of your customers will never pay for it. And if they do, it won't be nearly what it's worth.

Distribution: Channels of distribution include where your product is purchased and how it gets to your customers. It can be as simple as loading up your car for local deliveries, shipping your product to a retail outlet, or carrying a floppy disk from your computer to the mailbox.

You should make distribution as easy for your customers as possible. If they call and place an order directly from you, make sure you use a reliable shipping company. If your product is going to be available at retail stores, give the name, address and phone number of the store.

I hope this gives you a good starting point. I will go into details on how to design questionnaires and brochures in the next newsletter. In the meantime, think about what business you are in, find out as much about your customer base as possible, and start thinking about what channels of distribution will reach most of your customers. I also recommend that you buy a marketing book for your own reference. Find one specifically for entrepreneurs or small businesses. It will give you a host of ideas and strategies that won't cost you a fortune. Good luck!

